

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Stephen W. Scherer and Berge A. Minassian  
Application No.: 10/567,074 Group: Unknown  
371(c) Date: June 26, 2006 Examiner: Unknown  
Confirmation No.: 2296  
For: Lafora's Disease Gene



CERTIFICATE OF MAILING OR TRANSMISSION	
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May 4, 2007	<i>Beverly Weinberger</i>
Date	Signature
<i>Beverly Weinberger</i>	
Typed or printed name of person signing certificate	

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.129(a), or  
(First/Second submission after Final Rejection)
- ☒ under 37 CFR 1.97(b), or  
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☐ under 37 CFR 1.97(c) together with either:  
☐ a Statement under 37 CFR 1.97(e), as checked below, or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with:  
☐ a Statement under 37 CFR 1.97(e), as checked below, and  
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(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):  
Applicant requests that the IDS and cited reference(s) be placed in the application file.  
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

*Applies to original applications (other than design) filed on or after May 29, 2000*

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
- ☒ Copies of the cited reference, B1, B2 and C1-C30, are enclosed.
- ☒ Copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
- ☐ Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed. [OPTIONAL [The earlier application contains copies of the cited references.]]
- ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☐ The "concise explanation" requirement (non-English references) for reference(s) [ ] under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
  - ☐ the explanation provided in the Specification.
  - ☐ submission of the enclosed International Search Report.
  - ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
  - ☐ the enclosed English language abstract.

- ☐ Applicant requests that the following non-published pending applications be considered:  
(Affix a label or apply the stamp "Non-Published IDS Reference - Do Not Scan" to the front of each unpublished pending appl'n.)

Examiner's  
Initials

\_\_\_\_\_ U.S. Patent Application No. [    ], by [inventor(s)], filed [    ], Docket No.: [    ]  
\_\_\_\_\_ U.S. Patent Application No. [    ], by [inventor(s)], filed [    ], Docket No.: [    ]  
\_\_\_\_\_ U.S. Patent Application No. [    ], by [inventor(s)], filed [    ], Docket No.: [    ]

\_\_\_\_\_  
Examiner

\_\_\_\_\_  
Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed, except any application filed on or after June 30, 2003, which has been scanned into the PTO's Image File Wrapper (IFW) system and is available to the examiner.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [    ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[    ]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

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Dated: May 3, 2007

PTO-1449 REPRODUCED		ATTORNEY DOCKET NO. 4012.1000-003		APPLICATION NO. 10/567,074			
<b>INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION</b>  <b>April 24, 2007</b> (Use several sheets if necessary)				FIRST NAMED INVENTOR Stephen W. Scherer		371(c) DATE June 26, 2006	
				EXAMINER Unknown		CONFIRMATION NO. 2296	

U.S. PATENT DOCUMENTS				
EXAM- INER INI- TIAL	REF. NO.	DOCUMENT NUMBER Number-Kind Code (if known)	ISSUE DATE / PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT
	A1	6,825,328 B1	11-30-2004	Scherer <i>et al.</i>
	A2	2004/0241740 A1	12-02-2004	Scherer <i>et al.</i>

FOREIGN PATENT DOCUMENTS					
		DOCUMENT NUMBER Country Code-Number-Kind Code (if known)	DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	TRANSLATION YES NO
	B1	WO 00/05405 A2	02-03-2000	Scherer, <i>et al.</i>	
	B2	WO 00/05405 A3	02-03-2000	Scherer, <i>et al.</i>	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
C1	Wojcik, S.F., <i>et al.</i> , "Cloning of Bovine Parathyroid Hormone-Related Protein (PTHrP) cDNA and Expression of PTHrP mRNA in the Bovine Mammary Gland," <i>J. Mol. Endocrinol.</i> , 20:271-280 (1998).
C2	Serratos, J.M., <i>et al.</i> , "A Novel Protein Tyrosine Phosphatase Gene is Mutated in Progressive Myoclonus Epilepsy of the Lafora Type (EPM2)," <i>Human Molecular Genetics</i> 8(2):345-352 (1999).
C3	Sainz, J., <i>et al.</i> , "Lafora Progressive Myoclonus Epilepsy: Narrowing the Chromosome 6q24 Locus by Recombinations and Homozygosities," <i>Am. J. Hum. Genet.</i> , 61:1205-1209 (1997).
C4	Lehesjoki, Anna-Elina, "Molecular Background of Progressive Myoclonus Epilepsy," <i>THE EMBO Journal</i> 22(14):3473-3478 (2003).
C5	Chan, E.M., <i>et al.</i> , "Mutations in NHLRC1 Cause Progressive Myoclonus Epilepsy," <i>Nature Genetics</i> 35(2):125-127 (2003).
C6	Minassian, B.A., <i>et al.</i> , "Mutations in a Gene Encoding a Novel Protein Tyrosine Phosphatase Cause Progressive Myoclonus Epilepsy," <i>Nature Genetics</i> 20:171-174 (1998).
C7	Chan, E.M., <i>et al.</i> , "Genetic Mapping of a New Lafora Progressive Myoclonus Epilepsy Locus (EPM2B) on 6p22," <i>J. Med. Genet.</i> , 40:671-675 (2003).
C8	Minassian, B.A., <i>et al.</i> , "Progress Towards the Positional Cloning of a Gene for Lafora's Disease," <i>Neurology</i> 48:A428 (1997).

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PTO-1449 REPRODUCED  <b>INFORMATION DISCLOSURE STATEMENT</b>  <b>IN AN APPLICATION</b>  <b>April 24, 2007</b>  (Use several sheets if necessary)	ATTORNEY DOCKET NO. 4012.1000-003		APPLICATION NO. 10/567,074	
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	EXAMINER Unknown	CONFIRMATION NO. 2296	GROUP Unknown	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
C9	Database Sequence, GENBANK Accession No.: AK045746.	
C10	Database Sequence, GENBANK Accession No.: AL589723.	
C11	Database Sequence, GENBANK Accession No.: CAE62664.	
C12	Database Sequence, GENBANK Accession No.: AL023806.	
C13	Cavanagh, J.B., "Corpora-amylacea and the Family of Polyglucosan Diseases," <i>Brain Research Reviews</i> 29: 265-295 (1999).	
C14	Freemont, Paul S., "Ubiquitination: RING for Destruction?" <i>Current Biology</i> 10: R84-R87 (2000).	
C15	Fridell, Robert A., <i>et al.</i> , "Identification of a Novel Human Zinc Finger Protein that Specifically Interacts with the Activation Domain of Lentiviral Tat Proteins," <i>Virology</i> 209: 347-357 (1995).	
C16	Ganesh, Subramaniam, <i>et al.</i> , "Targeted Disruption of the <i>Epm2a</i> Gene Causes Formation of Lafora Inclusion Bodies, Neurodegeneration, Ataxia, Myoclonus Epilepsy and Impaired Behavioral Response in Mice," <i>Human Molecular Genetics</i> 11(11): 1251-1262 (2002).	
C17	Ganesh, Subramaniam, <i>et al.</i> , "Alternative Splicing Modulates Subcellular Localization of Laforin," <i>Biochemical and Biophysical Research Communications</i> 291: 1134-1137 (2002).	
C18	Ganesh, Subramaniam, <i>et al.</i> , "Laforin, Defective in the Progressive Myoclonus Epilepsy of Lafora Type, is a Dual-Specificity Phosphatase Associated with Polyribosomes," <i>Human Molecular Genetics</i> 9(15): 2251-2261 (2000).	
C19	Hatakeyama, Shigetsugu, and Nakayama, Kei-ichi I., "U-box Proteins as a New Family of Ubiquitin Ligases," <i>Biochemical and Biophysical Research Communications</i> 302: 635-645 (2003).	
C20	Ianzano, Leonarda, <i>et al.</i> , "Identification of a Novel Protein Interacting with Laforin, the <i>EPM2A</i> Progressive Myoclonus Epilepsy Gene Product," <i>Genomics</i> 81: 579-587 (2003).	
C21	Jackson, Peter K., <i>et al.</i> , "The Lore of the RINGs: Substrate Recognition and Catalysis by Ubiquitin Ligases," <i>Cell Biology</i> 10: 429-439 (2000).	
C22	Lalioi, Maria D., <i>et al.</i> , "Dodecamer Repeat Expansion in Cystatin B Gene in Progressive Myoclonus Epilepsy," <i>Nature</i> 386: 847-851 (1997).	
C23	Licht, Barbara G., <i>et al.</i> , "Clinical Presentations of Naturally Occurring Canine Seizures: Similarities to Human Seizures," <i>Epilepsy &amp; Behavior</i> 3: 460-470 (2002).	
C24	Lossos, Alexander, M.D., <i>et al.</i> , "Adult Polyglucosan Body Disease in Ashkenazi Jewish Patients Carrying the TYR <sup>329</sup> Ser Mutation in the Glycogen-Branching Enzyme Gene," <i>Annals of</i>	

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
		<i>Neurology</i> , 44(6): 867-872 (1998).
	C25	Minassian, B.A., M.D., <i>et al.</i> "Mutation Spectrum and Predicted Function of Laforin in Lafora's Progressive Myoclonus Epilepsy," <i>Neurology</i> 55: 341-346 (2000).
	C26	Minassian, Berge A., <i>et al.</i> , "Laforin is a Cell Membrane and Endoplasmic Reticulum-Associated Protein Tyrosine Phosphatase," <i>Annals of Neurology</i> 49(2): 271-275 (2001).
	C27	Minassian, Berge A., M.D., <i>et al.</i> , "Genetic Locus Heterogeneity in Lafora's Progressive Myoclonus Epilepsy," <i>Annals of Neurology</i> 5(2): 262-265 (1999).
	C28	Schoeman, Tanya, <i>et al.</i> , "Polyglucosan Storage Disease in a Dog Resembling Lafora's Disease," <i>J. Vet. Intern. Med.</i> 16: 201-207 (2002).
	C29	Thon, Vicki J., <i>et al.</i> , "Isolation of Human Glycogen Branching Enzyme cDNAs by Screening Complementation in Yeast," <i>The Journal of Biological Chemistry</i> , 268(10): 7509-7513 (1993).
	C30	Weinhaeusel, Andreas, <i>et al.</i> , "DNA Deamination Enables Direct PCR Amplification of the Cystatin B (CSTB) Gene-Associated Dodecamer Repeat Expansion in Myoclonus Epilepsy Type Unverricht-Lundborg," <i>Human Mutation</i> 22: 404-408 (2003).

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